

Contract No: EP-W-09-002
WA #: 023-RARA-02PE

Region 2 RAC2 Remedial Action Contract

Bi-Weekly Progress Report No.4 Remedial Action – Phase III (Southern Extraction Wells Installation)

Old Roosevelt Field Contaminated
Groundwater Area Site

Remedial Action

Garden City, New York

February 14, 2013

**CDM
Smith**

Remedial Action Contract

U.S. EPA Contract No.: EP-W-09-002

Remedial Action - Phase III (Southern Extraction Wells Installation)

Work Assignment No:	023-RARA-02PE
	Old Roosevelt Field Contaminated
	Groundwater Area Site
EPA Remedial Project Manager:	Sherrel Henry
CDM Smith Site Manager:	Thomas Mathew, P.E.

Prepared for:
U.S. Environmental Protection Agency
Region 2
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New York, New York 10007-1866

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Bi-Weekly Progress Report No. 4

Phase III - Southern Extraction Well Installation

1.0 Introduction

Pursuant of the Work Assignment Form (WAF) Statement of Work (SOW), for Region 2 Contract EP-W-09-002 Work Assignment 023-RARA-02PE, CDM Federal Programs Corporation (CDM Smith) is performing the Phase III (Southern Extraction Well Installation) Remedial Action (RA) at the Old Roosevelt Contaminated Groundwater Area Site, Garden City, New York. The Bi-Weekly Progress Report is intended to partially fulfill the requirements specified under WAF SOW for this assignment. This Bi-Weekly report is prepared for the work performed from January 14, 2013 to January 25, 2013.

The primary responsibility of the project geologist was to oversee all drilling and well installation activities to ensure that the work meets all requirements of the drilling statement of work and is performed by the Subcontractor in accordance with all applicable quality assurance, health and safety, and regulatory requirements.

The work completed during this reporting period includes: drilling the SEW-1D borehole using reverse circulation drilling methods, SEW-1D well installation, equipment disassembly at SEW-1D and equipment setup at SEW-1I, steam cleaning and investigation derived waste (IDW) handling, including delivery of IDW containers. Additionally, CDM Smith subcontractors completed a civil survey and a cultural resources survey onsite for the proposed underground pipeline from the southern extraction wells to the treatment building. This work is summarized in further detail below. A list of the supporting documentation attached with this bi-weekly progress report is as follows:

- Attachment 1 - CDM's Daily Status Report
- Attachment 2 - CDM's Field Log Book notes
- Attachment 3 - Photographic Log
- Attachment 4 - SEW-1D Well Construction Diagram

2.0 Personnel On-Site

The following personnel were on site during this reporting period:

CDM Smith - Contractor

Mike Ehnot	Project Geologist
Alan Eisenberg	Geologist
Thomas Mathew	Project Manager
Ali Rahmani	Project Engineer

Uni-Tech Drilling Company (UTD)-Drilling Subcontractor

Butch Hitzelberger	Head Driller
Brad Barnes	Helper
Jay Blemings	Helper

Seacoast Environmental Services-Investigation Derived Waste Subcontractor

Eugene Streiter

Kennon Surveying Services (KSS)-Civil Survey

Richard Grubb & Associates-Cultural Resources Survey

3.0 Summary of Work Performed

The following is a brief summary of the field activities performed during this reporting period (refer to Attachment 1 through Attachment 4 for the Daily Status Reports, field logbook notes, photographic log, and SEW-1D well construction summary, respectively):

■ SEW-1D

- UTD advanced a nominal 16-inch outside diameter (OD) Moab drag bit, via reverse circulation drilling methods, from 110 feet below ground surface (bgs) to 535 feet bgs.
- Drill cuttings were discharged directly from the borehole into the drill cutting container. Subsequently, the drill cuttings were transferred from the container to soil IDW rollofs, via backhoe.
- An 8-inch inside diameter (ID) stainless steel well was installed into the borehole. The well consisted of riser sections and two well screens. Well screens were set at 480 feet to 500 feet bgs and 510 feet to 525 feet bgs. A blank section from 500 feet to 510 feet bgs separated the well screens. A 5-foot length sump was affixed to the bottom of the lowermost well screen.
- The borehole annulus was backfilled with a sand filter pack, a sand seal and cement grout via tremie pipe.
- Following well completion, the drillers disassembled the piping and equipment used for reverse circulation drilling.

■ Investigation Derived Waste (IDW) Handling

- Seacoast moved two full soil IDW rollofs (#0008 & #9620) from SEW-1D to the staging area. Additionally, Seacoast delivered two new 20-cubic yard rollofs (#9781 & #9660) to the staging area.
- UTD moved two new rollofs (#9781 & #9660) from the staging area to SEW-1I.
- Seacoast personnel examined the site to obtain information pertaining to the upcoming water IDW transfer during well development.

■ SEW-1I

- UTD mobilized the Failing Jed A drill rig, drill cutting container, drill rods and associated drilling equipment, tools to SEW-1I for reverse circulation drilling.
- The drillers connected piping from the borehole to the drill cutting container, as before.
- Equipment Decontamination
 - UTD decontaminated the drill rig and all associated equipment using a pressure washer steam cleaner prior to use at SEW-1I.

■ Civil Survey

- KSS performed a civil survey on the contiguous properties from the southern extraction wells to the treatment system, pertaining to the proposed underground pipeline.
- KSS located and marked the underground utilities of the aforementioned parcels.

- Cultural Resources Survey
 - Richard Grubb & Associates conducted a cultural resources survey on the contiguous properties extending from the southern extraction well location to the treatment system.
- Health and Safety
 - CDM Smith conducted a daily Health and Safety meeting at the onset of each day.

4.0 Problems/Corrective Action

- UTD supplied 8-inch stainless steel well casings for the SEW-1D extraction well that did not conform to the drilling subcontract. Although these stainless steel riser sections conformed to the material specifications it did not conform to the Buy America Act. The non-compliance was immediately brought to the attention of the EPA. CDM Smith submitted a waiver request to the Buy America provisions to EPA describing field situations and the immediate non-availability of stainless steel riser pipes made in the USA. Compliant steel riser pipes will be delivered on time for the remaining two extraction wells. .

5.0 Deviations

The stainless steel riser sections installed at SEW-1D did not comply with the Buy America Act.

6.0 Conclusions

All RA construction work was completed in general accordance with RA Subcontract Documents and approved construction submittals, with the exception of the stainless steel riser sections placed at SEW-1D.

ATTACHMENT 1
DAILY STATUS REPORTS

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-14-13

Day: 35 (Monday)

WEATHER: Foggy & Mild

TEMP: 35/45

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
9:15	Mechanic	5 County Truck Tire Service	Replace Flat Tire on Support Truck
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [1/20 th Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [Empty]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD begins advancing a nominal 16-inch outside diameter (OD) Moab drag bit from 110 feet below ground surface (bgs) to depth, via reverse circulation drilling methods, at SEW-1D. SEW-1D is advanced to 165 feet bgs.			
-Drill cuttings are discharged into a container. A backhoe is used to remove the drill cuttings from the container and place them into a soil investigation derived waste (IDW) rolloff.			
-UTD mixes kiln dust into rolloff #0037 and rolloff #0042 using a backhoe, to de-water the soil IDW.			
-The drillers mobilize the stainless steel well and well backfill materials to the site on a trailer.			
WORK BEING INSPECTED:			
NA			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Driving in Foggy Conditions
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN: The drillers received a flat tire on their support truck. Subsequently, a mechanic arrived onsite to affix a new tire on the truck.
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: Reverse circulation drilling is slow through gravel and clay units. Drilling was slow today while trying to remove the gravel from the borehole.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-15-13

Day: 36 (Tuesday)

WEATHER: Overcast & Cool

TEMP: 30/40

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [1/15 th Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [Empty]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD resumes advancing a nominal 16-inch outside diameter (OD) Moab drag bit from 165 feet below ground surface (bgs) to depth, via reverse circulation drilling methods, at SEW-1D. SEW-1D is advanced to 267 feet bgs.			
-Drill cuttings are discharged into a container. A backhoe is used to remove the drill cuttings from the container and place them into a soil investigation derived waste (IDW) rolloff.			
WORK BEING INSPECTED:			
NA			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Lift with Knees
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN: The drill bit had to be retracted several times to remove clay and gravel that was clogging the entire bit. The clogged drill bit was prohibiting drilling advancement. A lot of time was required to retract and clean the drill bit. After clearing the drill bit, reverse circulation drilling resumed.
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: Reverse circulation drilling is slow through gravel and clay units. Drilling was slow today while trying to remove the gravel from the borehole.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-16-13

Day: 37 (Wednesday)

WEATHER: Raining & Cool

TEMP: 30/40

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [9/10 th Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [Empty]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD resumes advancing a nominal 16-inch outside diameter (OD) Moab drag bit from 267 feet below ground surface (bgs) to depth, via reverse circulation drilling methods, at SEW-1D. SEW-1D is advanced to 427 feet bgs.			
-Drill cuttings are discharged into a container. A backhoe is used to remove the drill cuttings from the container and place them into a soil investigation derived waste (IDW) rolloff.			
-The drillers weld ears onto stainless steel riser sections.			
WORK BEING INSPECTED:			
NA			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Watch Grip when it's Slick
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: Reverse circulation drilling is slow through clay units.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-17-13

Day: 38 (Thursday)

WEATHER: Partly Sunny & Cool

TEMP: 30/40

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot; Thomas Mathew; Ali Rahmani; Adel Rophael			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper); Jay Blemings (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rig Tender			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [1/2 Full]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD resumes advancing a nominal 16-inch outside diameter (OD) Moab drag bit from 427 feet below ground surface (bgs) to depth, via reverse circulation drilling methods, at SEW-1D. SEW-1D is advanced to the final depth of 535 feet bgs.			
-Drill cuttings are discharged into a container. A backhoe is used to remove the drill cuttings from the container and place them into soil investigation derived waste (IDW) rollofs.			
-The drillers weld ears onto stainless steel riser sections.			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

WORK BEING INSPECTED: CDM Smith confirmed that the stainless steel well screen, sand filter pack and sand seal well materials conformed to specifications. However, CDM Smith found that the stainless steel sections of riser casing were not made in the U.S.A., as specified in the drilling contract.
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Kill Switches on Drill Rig
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN: CDM Smith discovers that 8-inch diameter, stainless steel, 20-foot length of riser sections are not made in the U.S.A., as specified. Therefore, CDM Smith contacted UTD drillers to inform them of the matter. Subsequently, CDM Smith notified the EPA to discuss the matter.
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: Reverse circulation drilling is slow through clay units.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-18-13

Day: 39 (Friday)

WEATHER: Sunny & Cool

TEMP: 30/40

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper); Jay Blemings (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rig Tender			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [1/2 Full]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD lowers the 8-inch inside diameter (ID) stainless steel well into the SEW-1D borehole. The 30-slot well screen is set at 480 feet to 500 feet below ground surface (bgs) and also 510 feet to 525 feet bgs with a blank section set at 500 feet to 510 feet bgs. A 5-foot length sump is attached to the bottommost section of the well screen and 480 feet of riser sections are attached to the top of the uppermost well screen. Sections of screens, risers, blank, and sump are welded together for connection.			
-The drillers place backfill materials into the borehole annulus via tremie pipe. Filpro #1 sand is placed into the borehole annulus from 535 feet bgs up to 470 feet bgs. Tremie pipe sections are retracted from the borehole as backfill material accumulates in the borehole.			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

WORK BEING INSPECTED: CDM Smith confirmed that the stainless steel well screen, sand filter pack and sand seal well materials conformed to specifications. However, CDM Smith found that the stainless steel sections of riser casing were not made in the U.S.A., as specified in the drilling contract.
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Route to the Hospital
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN: CDM Smith allowed UTD to set the stainless steel well with the non-compliant (i.e., not made in U.S.A.) sections of stainless steel riser because new stainless steel riser sections could not be delivered to the site for two weeks and the SEW-1D borehole would collapse in the interim.
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: CDM Smith has granted approval to UTD to use cement grout as backfill material mixed in cement trucks; therefore, no bentonite will be used in the grout, as noted in the drilling statement of work.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-19-13

Day: 40 (Monday)

WEATHER: Sunny & Cool

TEMP: 30/40

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Alan Eisberg			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper); Jay Blemings (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rig Tender			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [1/2 Full]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD places backfill materials into the borehole annulus via tremie pipe. A 5-foot thick sand seal consisting of Filpro #00 sand is placed into the borehole annulus from 470 feet below ground surface (bgs) up to 465 feet bgs. Subsequently, cement grout is pumped into the borehole annulus via tremie pipe from 465 feet bgs up to approximately 100 feet bgs. The cement grout is delivered to the site in two cement mixer trucks.			
WORK BEING INSPECTED:			
NA			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Undisclosed
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: CDM Smith granted approval to UTD to use cement grout as backfill material mixed in cement trucks; therefore, no bentonite was used in the grout, as noted in the drilling statement of work.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-21-13

Day: 41 (Monday)

WEATHER: Cloudy & Cold

TEMP: 30/35

WIND: _____

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot; Ali Rahmani			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
Kennon Surveying Services (KSS)			
Richard Grubb & Associates-Cultural Resources Survey			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [1/2 Full]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD places backfill materials into the borehole annulus via tremie pipe. Cement grout is pumped into the borehole annulus via tremie pipe from 100 feet below ground surface (bgs) up to the surface. The cement grout is delivered to the site in a cement mixer truck.			
-The drillers retract the remaining sections of tremie pipe from the borehole.			
-UTD transfers soil IDW from the drill cuttings container to the 20-cy rolloff #9620, using the backhoe. The drill cuttings container is cleaned out.			
-The drillers disassemble the nut and bolt connections from the steel piping.			
-KSS performs a civil survey on the property parcels from the southern extraction well location to the treatment building, pertaining to the proposed underground pipeline. The civil survey includes locating underground utility lines.			
-Richard Grubb & Associates performs a cultural resources survey on the property parcels from the southern extraction well location to the treatment building, pertaining to the proposed underground pipeline.			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

WORK BEING INSPECTED: NA
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Safety Glasses
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: Civil survey and cultural resources survey activities will resume tomorrow for completion.

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-22-13

Day: 42 (Tuesday)

WEATHER: Sunny & Cold

TEMP: 15/25

WIND: Windy

SEW-1D			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
Kennon Surveying Services (KSS)			
Richard Grubb & Associates-Cultural Resources Survey			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ SEW-1D (January 2, 2013-Present) [Full]			
Rolloff #9620 @ SEW-1D (January 2, 2013-Present) [1/2 Full]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD transfers soil IDW from the drill cuttings container to the 20-cy rolloff #9620, using the backhoe. The drill cuttings container is cleaned out and moved away from SEW-1D.			
-The drillers cut the steel stickup and steel piping connections using an acetylene torch. Additionally, the drillers cut down the stainless steel well casing to the surface grade and weld a cover over the top of the well.			
-UTD moves the drill rig and equipment away from SEW-1D and prepares to relocate items to SEW-11.			
-KSS resumes and completes a civil survey on the property parcels from the southern extraction well location to the treatment building, pertaining to the proposed underground pipeline. The civil survey includes locating underground utility lines.			
-Richard Grubb & Associates resumes and completes a cultural resources survey on the property parcels from the southern extraction well location to the treatment building, pertaining to the proposed underground pipeline.			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

WORK BEING INSPECTED: NA
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN: -Daily tailgate Health & Safety meeting Topic: Haste Makes Waste
TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS:

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-23-13

Day: 43 (Wednesday)

WEATHER: Sunny & Cold
TEMP: 12/18
WIND: Windy

SEW-11			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
11:45	Gene Streiter	Seacoast Environmental	View Site for Water IDW Transfer
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ Staging Area (January 2, 2013-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9620 @ Staging Area (January 2, 2013-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9781 @ Staging Area (January 23, 2013-Present) [Empty]			
Rolloff #9660 @ Staging Area (January 23, 2013-Present) [Empty]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD welds the steel stickup to the outer casing of SEW-11.			
-The drillers maneuver the drill rig and support brace to SEW-11 and position the rig in place.			
-Seacoast Environmental delivers two rolloff containers (#9781 & #9660) to the staging area. Additionally, Seacoast moves two rollofs (#0008 & #9620) from SEW-1D to the staging area.			
WORK BEING INSPECTED:			
NA			
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN:			
-Daily tailgate Health & Safety meeting Topic: Wind Affects			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS:

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-24-13

Day: 44 (Thursday)

WEATHER: Sunny & Cold

TEMP: 12/18

WIND: Windy

SEW-11			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ Staging Area (January 2, 2013-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9620 @ Staging Area (January 2, 2013-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9781 @ Staging Area (January 23, 2013-Present) [Empty]			
Rolloff #9660 @ Staging Area (January 23, 2013-Present) [Empty]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-UTD welds piping and makes piping connections from the drill rig to the drill cutting container at SEW-11.			
-The drillers move two new rollofs (#9781 & #9660) from the staging area to SEW-1 using the backhoe.			
-UTD moves the drill bit from the staging area to SEW-11.			
WORK BEING INSPECTED:			
NA			
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN:			
-Daily tailgate Health & Safety meeting Topic: Skin Protection			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS:

By: Mike Ehnot

Title: Geologist

Daily Status Report

PROJECT: **Old Roosevelt Field Site**
Remedial Action

Date: 1-25-13

Day: 45 (Friday)

WEATHER: Sunny & Cold

TEMP: 15/25

WIND: _____

SEW-11			
PERSONNEL ONSITE			
CDM Smith: Mike Ehnot			
Uni-Tech: Butch Hitzelberger (Driller); Brad Barnes (Helper)			
VISITORS			
TIME	NAME	REPRESENTING	REMARKS
EQUIPMENT IN USE:			
Failing Jed A Drill Rig			
Water/Tender truck			
Box Trailer			
One-ton Support truck			
Trailer loaded with well risers, screens and backfill materials			
JCB 3CX Backhoe			
Rolloff #202646 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #202647 @ Staging Area (November 16, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0037 @ Staging Area (November 28, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9869 @ Staging Area (November 30, 2012-Present) [Full]			
Rolloff #0042 @ Staging Area (December 17, 2012-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #0008 @ Staging Area (January 2, 2013-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9620 @ Staging Area (January 2, 2013-Present) [Full] {Ready for Soil IDW Disposal}			
Rolloff #9781 @ Staging Area (January 23, 2013-Present) [Empty]			
Rolloff #9660 @ Staging Area (January 23, 2013-Present) [Empty]			
Rolloff #9613 @ Staging Area (January 9, 2013-Present) [Kiln Dust]			
Adler Tank #A1241 @ Staging Area (November 30, 2012-Present) [300 gallons]			
CONSTRUCTION ACTIVITIES COMPLETED AND/OR IN PROGRESS:			
-The drillers clean the drill rods at the staging area.			
-UTD moves drill rods from the staging area to SEW-11.			
-The drillers attach new hydraulic lines to the backhoe.			
-UTD lowers the drill bit and drill rods into the SEW-11 borehole.			
WORK BEING INSPECTED:			
NA			
JOB SAFETY. INDICATE WHAT WAS CHECKED, RESULTS, AND CORRECTIVE ACTIONS TAKEN:			
-Daily tailgate Health & Safety meeting Topic: Hard Hats			

Daily Status Report (Continued)

PROJECT: Old Roosevelt Field Site

TESTING PERFORMED:
PROBLEM/DELAYS/CORRECTIVE ACTION TO BE TAKEN:
GREEN REMEDIATION PRACTICES IMPLEMENTED AND QUANTITIES TRACKED:
COMMUNICATION WITH CONTRACTOR STAFF:
MEETING:
ADDITIONAL ACTIVITIES AND REMARKS: UTD will mobilize well materials for SEW-1I to the site on Monday, January 28, 2013.

By: Mike Ehnot

Title: Geologist

ATTACHMENT 2
FIELD LOGBOOK NOTES

JANUARY 14, 2013
EXTRACTION WELL LOCATION
WEATHER: FOGGY & MILD
7:00 I ARR. ON SITE
LTD DRILLERS ON SITE 8
BUTCH HITZELBERGER - DRILLER
FRANK BARNES - HEVER
7:15 HYS MTR: TOPIC: DRIVING IN
FOGGY CONDITIONS
7:10 I CALIBRATE PND AS BEFORE
7:15 SEW-10
BEGIN ADV. NOMINAL 12" @
MOAB DAG BIT VIA REVERSE
CIRCULATION DRILLING FROM
112 FT BGS (BOTTOM OF STEEL
CASING) TO DEPTH; CUTTINGS
DISCHARGES INTO CONTAINER VIA
PIPING FROM BH.
PND BZ: DPM
PND CUTTINGS: DPM
NOTE: LTD ONE-TON PICKUP
TRUCK HAS FRONT FLAT TIRE
- OCCURRED ENROUTE
MIKE EMMOT
1/14/13

(122)

SEW-10
5 COUNTY TRUCK TIRE
SERVICE MECHANIC ON SITE TO
REPLACE FLAT TIRE
10:10 TIRE FIXED, RESUMES
10:15 STOPPED REVERSE CIRC
DRILLING AT 125 FT BGS.
DISCONNECT INTERIOR AIR LINE
& ADD 20 A. LENGTH (1111111111)
RE-ATTACH AIR LINE
10:15 RESUME REVERSE CIRC
DRILLING FROM 125 FT TO DEPTH
14:15 STOPPED REVERSE CIRC DRILLING
AT 145 FT BGS
NOTE: DRILLER INFORMS ME
THAT V. SLOW DRILLING DUE TO
TRYING TO GET "JUNK" (I.E.,
GRANULAR CEMENT OUT OF BH)
MUST REMAIN SLOW TO EXTRACT
"JUNK" FROM BH
14:15 DRILLER DIS- & RE-ASSEMBLY
AIR LINE TO ADD 20A DRILLING
14:15 RESUME REVERSE CIRC DRILLING
FROM 145 FT TO DEPTH.
MECHANIC PLACE KUN JUST TWO
HOURS UNF21 * W37 via BACKLOG. &
MOVE CUTTINGS FROM CONTAINER TO
HOLLAND 0000. MMR 1/14/13

(123)

SEW-10
1700 STOPPED DRILLING &
165 A. BGS — WITH
RESUME TOMORROW.
1710 DRILLERS AT ARMY CAMP
1 SECURE SITE
1730 ALL W. SITE

DAILY SUMMARY

SEW-10

ADV. NOMINAL 16" OD MOAB
DRAG BT FROM 110 A TO 165 A
BGS IN REVERSE CIRC DRILLING
SOIL DOWN CONTAINER
IN J.C. CONTAINER AND
TRANSFERRED IN BACKHOE INTO
ROLL OFF #0000

NOTE: DRILLERS BROUGHT IT WELL
KICKY FOREW & SAND TO SITE IN
TRAILER (PARKED IN FENCE ROW)
1/15/13

(124)

1/14/13

JANUARY 15, 2013
EXTRACTION WELL LOCATION
WEATHER: OVERCAST & MILD BUT TRAP
500 I. APR. DRYITE
UTA DRILLERS ON SITE
BUTCH HITZELBERGER - DRIVER
BRAD BARNES - HELPER
H'S MTG TOPIC: LIFT & KNEES
DRILLERS CHANGE/ADJ
DRILL ROD AT SEW-10

NOTE: UTD WES 7 OD
DRILL RODS TO ADV. TO 165 A.;
HOWEVER, DRILLERS WILL USE
5" OD DRILL ROD FOR REMAINDER
OF BH; UTD DISCOVERS THAT
THEY "GAWES" 2 FEET WHEN
SWITCHING TO 5" OD ROD SO
THAT BH IS DOWN TO 167 A.
NOW. THEREFORE, DRILL RUN
WILL BE FROM 167-187 A
RGD 4 OD ONE

710 RESUME REVERSE CIRC
DRILLING FROM 167 A. BGS TO DEPTH
NOTE: DRIVER INFORMS ME THAT
REVERSE CIRC DRILLING IS V. SLOW
IN CLAY UNITS. 710 BT: OPM
MIKE EHNOT
1/15/13

(125)

SEW-10

NOTE: DRILLER INFORMED ME
THAT SAND USED AS BACKFILL
IN SEW-10 WILL ALSO BE
DRILLING THROUGH CLAY;
HOWEVER

THIS WON'T BE CASE AT SEW-10
AND SEW-15,

THEREFORE

DRILLING WILL BE MUCH SLOWER
FOR THESE WELLS.

1250 STOPPED DRILLING AT
192 A. BGS; CLEAN BIT!

BIT WAS CLOGGED w/
CLAY & COBBLE/GRAVEL!!!

THIS PREVENTING EFFICIENT
DRILLING ADVANCEMENT

VERY SLOW DRILLING THROUGH
CLAY UNITS

1700 STOP DRILLING AT 267A
BGS FOR TODAY; HAD TO

CLEAN BIT ORDER TO KNUCK
CLAY/GRAVEL OFF MOAB DRILLER

1750 DRILLERS PUT AWAY EQUIP.
END ALL LV. SITE

Still Summary

(120)

ADV. 16" MOAB BIT via REVERSE CIRC
FROM 167 TO 267A BGS.

JANUARY 16, 2013

EXTRACTION WELL INSTALLATION
WEATHER: RAINING; SWEET WINDY
700 I AM ON SITE

LTG DRILLERS ON SITE:

BUTCH HITZELBERGER - DRILLER
BRAD BARBER - HELPER

705 HQ / MTG. TOP: WATCH
GRIP WHEN ITS SLICK

710 I CALIBRATE PW AS BEFORE
MEANWHILE DRILLERS PREPARE TO

RESUME REVERSE CIRCULATION
DRILLING AT SEW-10;

ADD NEW 20-FT LENGTH
DRILL ROD AS BEFORE

720 RESUME ADV. 16" ON MOAB
DRAG BIT VIA REVERSE CIRC

DRILLING METHODS FROM
267A BGS TO DEPTH.

DRILLERS CUTTINGS DISCHARGES
INTO CONTAINER; CUTTINGS

REMOVED FROM CONTAINER
PERIODICALLY VIA BACKHOE

& PLACES INTO PULLOFF DOOR.
PIS BZ: DRPM

DN CUTTINGS: DRPM
MIKE EMMOT

MIKE 1/16/13

(127)

SEW-10

840 STOPPED DRILLING AT
267 FT BGS & ADD
DRILL ROD AS BEFORE
905 RESUME DRILLING 16" OD
MOAB DRAG BIT FROM 267 FT
TO 307 FT IN REVERSE CIR

DRILLING METHODS
930 STOPPED DRILLING
AT 327 FT. BGS - CLEAN UP
BH IN AIRLINE; ADD 5' OD
DRILL ROD, AS BEFORE
950 RESUME REVERSE CIR
DRILLING FROM 327 FT BGS
TO DEPTH

1030 STOPPED DRILLING AT 347 FT
BGS - DRILLING SLOWED DOWN
THE LAST FEW FEET DUE TO
CLAY UNIT.

DRILLERS ADD 20 FT DRILL ROD
AS BEFORE

1130 RESUME DRILLING IN
REVERSE CIR FROM 347 FT TO DEPTH.

AFTER GREASING MECHANICAL

PARTS ON DRILL RIG.

MIKE BURNS

WMA 1/16/13

(20)

SEW-10

1200 MEANWHILE HARPER IS
PREP'ING 5S WELL RIGER
PRIOR TO INSTALLATION WELDERS

1300 STOPPED DRILLING AT 367 FT
BGS; ADD DRILL ROD

1330 RESUME REVERSE CIR
DRILLING FROM 367 FT BGS TO DEPTH.

1400 STOPPED DRILLING AT 387 FT BGS;
ADD 20 FT. LENGTH DRILL ROD

1435 RESUME REVERSE CIR DRILLING
FROM 387 FT. TO DEPTH.

1500 STOPPED DRILLING AT 407 FT.
BGS; MOVE DRILL ROD

TO SEW-10; ADD DRILL ROD
1530 RESUME REVERSE CIR

DRILLING FROM 407 FT BGS TO DEPTH
1600 STOPPED DRILLING AT 427 FT BGS;

BLOW OUT BH; MOVE DRILL
ROD TO SEW-10; ADJUST
WATER INTAKE INTO BH; PUT AWAY
EQUIPMENT.

1700 ALL W. SITE

DAILY SUMMARY

SEW-10

ADD 16' OD MOAB DRAG BIT FROM
267 FT TO 427 FT. (160')

WMA 1/16/13 (19)

JANUARY 17 2013

EXTRACTION WELL INSTALLATION
WEATHER: Partly Sunny, Wind & Temp
700 I AM ON SITE

LTD DRILLERS ON SITE &
BUTCH HITZBERGER - DRILLER
BOB BARNES - HELPER
715 H & S MTC. TOPIC: KILL SWITCHES
ON DRILL RIG

710 CALIBRATE P.D., AS BEFORE
710 DRILLERS PREP TO RESUME
DRILLING AT SEW-1D, AS P.D.

730 RESUME ADV. 12" OS
MOAB DRAG BT IN REVERSE CIR
DRILLING FROM 427 FT BGS
TO DEPTH

DRILL CUTTINGS CONTAINERS
AS BEFORE & PLACES INTO KILL BOX
P.D. BZ: 01 PM

P.D. CUTTING: 01 PM
830 STOPPED DRILLING AT 447 FT BGS;
CLEAN OUT BIT; ADD DRILL ROD,
AS BEFORE

900 RESUME REVERSE CIR
DRILLING FROM 447 FT TO DEPTH
WELD RIGS: MIKE EHNT

(130)

WMA 1/17/13

SEW-1D

1100 THOMAS MATHEW, ALI
RAMON & ALEC KOLHAER (CMT)
LWT SEW-1D

1115 STOPPED DRILLING AT 467 FT
BGS. ADD DRILL ROD

1145 RESUME DRILLING IN
REVERSE CIR DRILLING FROM
467 FT TO DEPTH

1220 STOPPED DRILLING AT 487 FT BGS
ADD DRILL ROD

1250 RESUME REVERSE CIR
DRILLING FROM 487 FT BGS TO DEPTH

1400 STOPPED DRILLING AT 507 FT BGS
(U.S. SLOW @ END OF DRILL ROD
DUE TO CLAY). ADD DRILL ROD

1435 RESUME REVERSE CIR DRILLING
FROM 507 FT BGS TO DEPTH

1525 JAY BLEMING (VTO)
ARE WHITE AS ~~DRILL~~ HELPER
FOR DRILL CREW (6 FIG TOWER)

1555 STOPPED DRILLING AT 527 FT.
ADD DRILL ROD

1605 RESUME DRILLING IN REVERSE
CIR DRILLING FROM 527 FT BGS
TO DEPTH.

WMA 1/17/13

(131)

SEW-10

16:35 STOP/END REVERSE CURR
DRILLING AT 535 FT. BGS

NOTE: DRILLERS NEED TO
DRILL SEVERAL FEET BELOW
WELL DEPTH TO "ALLOW SPACE"
FOR HEAVIES TO FALL & NOT
BLOCK AREA AT FURTHER DEPTH

NOTE: DRILLERS HAVE
FILES ROLLER #0008 & SOIL ROW
AND ADD PLACES CUTTERS INTO
ROLLER #9420.

17:30 DRILLERS SECURE SITE
ALL W. SITE.

DAILY SUMMARY

SEW-10

ADV. 16" DIAMETER BIT
FROM 427 FT. TO 535 FT. BGS (108')
IN REVERSE CURR DRILLING
LOW HANGING
DRILL CUTTERS TRANSFERRED
FROM CONTAINER TO ROLLERS

WMA 1/17/13

(132)

JANUARY 18, 2013

EXTRACTION WELL INSTALLATION

WEATHER: SUNNY & COLD

7:15 I AM ON SITE AFTER
CHECKING OUT OF HOTEL

LTD DRILLERS ON SITE &

BUTCH HITZELBERGER - DRILLER

BRAD BARNES - HELPER

JAY BLEMINGS - HELPER

7:35 DRILLERS PREPARE TO RETRACT

DRILL ROD; MANUEVER VEHICLES
TO ALLOW PATHWAY FOR BACKHOE

TO TRANSPORT ROD TO SECOND PAD

7:50 HDS HIG TOPIC: ROUTE THROUGH

7:55 DRILLERS RETRACT DRILL ROD

FROM SEW-10; DISASSEMBLE

AIR LINE (100 FT. SECTION)

9:15 RECEIVED PHONE CALL FROM

(DAN BARR LTD) TO PROCEED

WITH WELL INSTALL TODAY AS

DIRECTED BY COM

10:00 DRILLERS FINISH RETRACTING DRILL

ROD & DRILL BIT; WELD EARS

ONTO 5" DIAM. OVER

MIKE RHODES

WMA 1/18/13

(133)

SEW-10
 11⁴⁵ DRIVER & I MEASURE
 THE LENGTHS OF THE 20-FT RISER
 SECTIONS; MOST SECTIONS ARE
 20' 1" LONG
 THE TOTAL LENGTH OF ALL THE
 RISER SECTIONS IS 481' 11";
 THEREFORE WE'LL HAVE A 1' 11"
 STICKUP

12⁰⁵ LOWER 5-FT SUMP INTO
 BH CASING & SUSPEND
 HORIZONTALLY w/ DRILL PIPE
 12²⁰ SUSPEND 15-FT LENGTH OF
 30-PICT WELL SCREEN (JOHNSON)
 ABOVE THE SUMP

12²⁵ WELD SUMP & SCREEN TOGETHER

12³⁰ BEGN LOWERING 8" IS
 SCHEDULE 40, TYPE 304
 STAINLESS STEEL WELL ASSEMBLY
 INTO SEW-10

12³⁵ SUSPEND 10-FT BLANK
 ABOVE WELL ASSEMBLY IN BH,
 AS ABOVE & WELDS
 TOGETHER; THEN LOWER
 WELL ASSEMBLY INTO
 SEW-10 BH

(137)

WWT 1/18/13

SEW-10

FT	ITEM	DEPTH
1	5-FT SUMP	525' - 530'
2	15-FT SCREEN	510' - 525'
3	10-FT BLANK	500' - 510'
4	20-FT SCREEN	480' - 500'
5	20-FT RISER	460' - 480'
6	20-FT RISER	440' - 460'
7	20-FT RISER	420' - 440'
8	20-FT RISER	400' - 420'
9	20-FT RISER	380' - 400'
10	20-FT RISER	360' - 380'
11	20-FT RISER	340' - 360'
12	20-FT RISER	320' - 340'
13	20-FT RISER	300' - 320'
14	20-FT RISER	280' - 300'
15	20-FT RISER	260' - 280'
16	20-FT RISER	240' - 260'
17	20-FT RISER	220' - 240'
18	20-FT RISER	200' - 220'
19	20-FT RISER	180' - 200'
20	20-FT RISER	160' - 180'
21	20-FT RISER	140' - 160'
22	20-FT RISER	120' - 140'
23	20-FT RISER	100' - 120'
24	20-FT RISER	80' - 100'

WWT 1/18/13

(138)

#	ITEM	DEPTH
25	20-A RISER	60'-80'
26	20-A RISER	40'-60'
27	20-A RISER	20'-40'
28	20-A RISER	0-20'

WELL ASSEMBLY CONSISTS OF 8" ID TYPE 304 SCH 40 STAINLESS STEEL WELL w/ (2) WELL SCREENS [30-SLOT] SET AT 480'-500' & 510'-525' SEPARATED BY 10-A BULK AT 500'-510' w/ A 5-A SUMP AT 525'-530'

CENTRALIZERS PLACED INTO WELL ON SUMP TOP OF LOWEST WELL SCREEN 420' 360' 300' 240' 180' 120' & 60'.

NOTE: STEEL SHAPES CENTRALIZED EVERY 100 FT BUT DRILLERS INITIALS EVERY 60 FT FOR GREATER SAFETY.

1/18/13

(136)

SEW-1A

12³⁵ LTD SETS UP A SECOND WELDER AT SEW-1A TO REPAIR WELDING.

12⁵⁰ SUSPEND 20-A LENGTH OF 30-SLOT WELL SCREEN ABOVE THE WELL ASSEMBLY IN BH, & ABOVE & WELD TOGETHER THE LOWER WELL ASSEMBLY INTO SEW-1A BH.

MEANWHILE, HEDER TRANSPORTS 20-A SECTIONS OF RISER TO SEW-1D.

NOTE: DRILLERS USE A LEVEL TO VERIFY WELL ASSEMBLY IS STRAIGHT VERTICALLY.

14⁰⁰ LOWER 58 WELL ASSEMBLY INCL. SUMP, SCREENS, BULK & 60-A OF RISER THIS FAR. SUSPEND 20-A IN RISER WELL THIS ASSEMBLY & WELD TOGETHER THE LOWER TO DEPTH.

14¹⁵ FILTER ON DEW RIG EDGE BECOMES CLOGGED & DRILLERS ASK THEM CONTINUE TO WELD 20-A RISER SECTIONS TO WELL ASSEMBLY.

MIKE BROS

1/18/13 (137)

SEW-10

15:30 I AM INFORMED THAT
CAM HAS ALLOWED FOR THE
GROUT TO BE PLACED INTO

20:30 THE BH ANNULUS OF BEARWITE
8" FIBERGLASS LINING
AS IT WILL NOT SET BY

100% SHORT SECTION
OF STICKUP SO THAT
WELL CAN BE LOWERED

20:30 TO 530A FOR FINE
REINFORCED LOWER TRENCH

100% T.B.H. ANNULUS
21:30 PLACE FURD #1 SAND
INTO BH ANNULUS FROM
535 FT RISE UP TO 470A-BC

PLACE FURD #2 SAND
INTO BH ANNULUS VIA T.B.
FROM 470A-BC TO 465A-BC

NOTE: T.B. REQUIRES AS
DAS ACCOUNTANT IN BH
NOTE: TIME CONSUMING TO ADD
SAND DUE TO FROZEN SAND BASE OF BORE
THAT COULD NOT BE USED.

MINIEMOT

1/18/13

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SEW-10

NOTE: DRILLERS WILL COMPLETE
WELL INSTALLATION TOMORROW (1/19)
W/ THE ADDITION OF GROUT W/ A
CEMENT TRUNKS. ALAN ESPERER
WILL REPLACE THE TRENCH
DAILY SUMMARY

SEW-10

INSTALL 8" ID STANLESS STEEL
WELL W/ 30-SLOT WELLSCREENS
SET AT 480'-500' & 510'-525';
BLANK AT 520'-570'; DUMP AT
525'-530'.

SECTIONS OF STANLESS STEEL
WELLS ARE WELDED TOGETHER.

PLACE FURD #1 SAND INTO
BH ANNULUS VIA TRENCH LINE
FROM 535 FT UP TO 470 FT.

WILL ADD FURD #2 SAND & GROUT
TOMORROW.

1/18/13

(139)

January 19, 2013

Personnel: A. Eisberg, B. Hitzelberger, B. Barnes
J. Bleminings

Weather: Sunny 30°F

Scope: Add choke sand to the well (546) then
grout well

6:30 CDM Smith AE on site

7:30 UTD BH. on site Review progress
discuss scope, starting soil can warm up
wait on the rest of UTD crew.

7:50 The rest of the UTD crew arrives.
B.B. + JB Start Backhoe and allow
them to warm up. Arrange equipment
8:05 468 #1 Filpro prepare to set choke
sand.

8:15 BH goes out for supplies

8:25 BH calls to tell us to put 3 more
bags of #1 sand in the well he
claims he made a mistake on the water
and this should fix it.

8:33 Drillers Set up a tremmie pipe and
funnel

8:45 Finish putting in 3 bags of #1 and
3 bags of #00 sand set sand

9:33 Drillers finish measuring new well depth
466' bgs

(140)

9:40 Drillers add more #00 sand to the well

9:52 Drillers weld a plate to the top of the 8" well

10:00 Set up pump for grout and clear air
from system. Circulate water through
the well outside of the well

10:20 Drillers move the welder to a support vehicle
for use on another site

11:06 Cement truck arrives Seville City mix corp

11:10 Check grout and then start pumping it
down the 2" tremmie pipe

11:28 The second cement truck arrives and puts
while we continue to pump the grout down
the tremmie

11:37 The first cement truck is finished and
the second one is preparing to leave in.

12:17 The second cement truck is finished and
leaves the site, while the drillers pull
the tremmie pipe

12:45 Drillers continue to clean cement
tremmie pipe

12:55 Move and organize equipment

1:30 All personnel off site

(141)

JANUARY 21, 2013
EXTRACTION WELL INSTALLATION
WEATHER: CLOUDY & COLD
700 F ARR. ON SITE

UTO DRILLERS ON SITE &
BUTCH HITZBERGER - DRIVER
BRAD BARNES - HELPER

705 H&J HTG TPK: SAFETY GLASS
705 DRILLERS INFORM ME

THAT GROUT IN SEW-10
BH ANNULUS IS W/ID A BGS.
THEREFORE, THEY HAVE
SCHEDULED A LOAD OF CEMENT
TO BE DELIVERED ON SITE TODAY
AT 9 AM

IN THE MEANTIME, UTO PREP
TO COMPLETE GROUTING OF SEW-10
800 KENON SURVEYORS ON SITE

TO SURVEY PARCELS FROM
SEW LOCATION ALONG PROPOSED
PIPELINE TO COM TREATMENT BAS.

ALL RAHMANI (CON) ON SITE &
SURVEYING CREW.

930 CEMENT TRUCK ARR. ON SITE
MIKE BLATT

1/21/13

(142)

SEW-10
930 PUMP GROUT (CEMENT) FROM
CEMENT TRUCK INTO UTO TUB;
DRILLERS STOP CEMENT W/ TUB
LONG SHAFTS; THEN PUMP
GROUT FROM TUB INTO BH
ANNULUS, IN TRASH BAG, THEN
STEEL TREND PIPE
FROM 100 A TGS UP TO SURFACE
1045 SEWLINE CENTRAL MIT COOL
CEMENT TRUCK LVS. SITE
1045 DRILLERS RETREAT REMAINING
TREND PIPE FROM SEW-10 BH.
1105 ALL RAHMANI (CON) W. SITE
1130 I CHECK ON CREWS
WORKING AT FB FIELD ADJACENT
TO STEWART SCHOOL PROPERTY
KENON SURVEYORS (KSS):
MATT MALINDO
COREY SELINGO
KSS HAS SUBCONTRACTOR
ON SITE FOR UTILITY CLEARANCE
RICHARD GRUBB & ASSOC.
PERSONNEL ON SITE PERFORMING A
CULTURAL RESOURCES SURVEY
INCL. UNDISTURBED SOIL & ST. FRUIT
FOR ARCHEOLOGICAL ARTIFACTS.
1/21/13

(143)

SEW-10
 12⁰⁰ DRILLERS USE BACKHOE
 TO REMOVE/TRANSFER CUTTINGS
 FROM CONTAINER TO ROLLER;
 SUBSEQUENTLY, DRILLERS
 DE-WATER CONTAINER THEN
 CLEAN OUT CONTAINER
 MEANWHILE
 DRILLERS REMOVE BOOTS/ROPS
 FROM PIPING CONNECTING
 CONTAINER FOR DISINTEGRATION
 15⁰⁰ DRILLERS LV. SITE
 15³⁰ KSP. FELL. W. SITE
 16⁰⁰ RICHARD GRUBB & ASSOC.
 PERS LV. SITE
 NOTE: KSP & GRUBB PERS.
 WILL RETURN TO SITE TOMORROW
 TO FINISH WORK.
 16⁰⁰ I W. SITE
DAILY SUMMARY

SEW-10

- GRUBB FROM 0-1000. RGS
- REMOVE SOIL/ROPS FROM CONTAINER
- CLEAN OUT CONTAINER
- REMOVE CONNECTING FROM PIPING
- & D.C. CONTAINER
- KSP SURVEYING
- GRUBB CONT. RESOURCES SURVEY 1/21/13

(144)

JANUARY 22, 2013
 EXTRACTION WELL INSTALLATION
 WEATHER: SUNNY & V. COLD
 7⁰⁰ I AM ON SITE;
 LTD DRILLERS ON SITE &
 BUTCH HITZELBERGER - DRILLER
 BRAD BARNES - HELPER
 7¹⁵ HAS HTG. T-10 - HASTE/MAKES
 WASTE
 7⁴⁵ DRILLERS GATHER TRASH
 ON SITE & PLACE INTO TRASH
 REEFSTACLE AT COM TREATMENT
 PLANT
 7⁵⁰ DRILLERS TRANSPORT
 TREK/BIKE FROM SEW-10 TO
 THE STAGING AREA DELCON HAS
 8⁰⁰ SURVEYORS RETURN TO SITE;
 GRUBB ADDS CIRCULAR
 RESOURCES SURVEY RESUMES
 ON VILLAGE & GARDEN CITY
 PARCEL NEAR STAGING AREA
 9³⁰ HYDRAULIC LINE ON BACKHOE
 WAS OUT DURING WORK; THEREFORE
 DRILLERS CONTAIN POTENTIAL LEAK &
 GO TO NOBELAND'S HOUSE TO OBTAIN
 A NEW HYDRAULIC LINE
 MIKE EHART
 1/22/13

(144)

SEW-10
 1030 DRILLERS OBTAINED
 NEW LINE & RELOCATED
 TO BACKHOLE
 1100 CEMENTAL RESOURCES PER
 U. SITE
 1230 ALL LINE IN RIG. BLEW
 DRILLERS IN SITE TO OBTAIN
 AND LINE
 1500 DRILLERS CUT STEEL LINE & SAW
 PILING FROM BH. DITCH USING
 CONTAINER VSWG ACROSS LINE
 DITCH; MOVES DRILL RIG
 AWAY FROM SEW-10; CREWS
 ON REMAINDER OF DEE CUTTINGS
 CONTAINER. MOVED CONTAINER
 AWAY FROM SEW-10 TO CONEL
 1630 SURVEYORS IN SITE
 NOTE: SURVEYORS LOCATE V.G.
 UTILITY LINE RUNNING "WEST TO EAST"
 FROM SEW LOCUS TO STAGING
 AREA DECON PAD.
 1730 ALL IN SITE

DAILY SUMMARY

SEW-10
 CUT PIPE 10' WITH STICKS;
 MOVE DRILL RIG & D.C. CONTAINER.
 SURVEY
 CIVIL
 CEMENTAL RESOURCES

JANUARY 23 2013
 EXTRACTION WELL INSTALLATION
 WEATHER: SUNNY, WINDY E V. CALM
 FUD I ARR. ON SITE;
 LTD DRILLERS ON SITE 8
 BUTCH FITZELBERGER - DRIVER
 BRAD BARNES - HELPER
 705 H & S MTE. TOPIC: WIND AFFECTS
 NOTE: FCI / SEACAST HAS
 DELIVERED A NEW 20-CY LINES
 ROLL OFF # 9781 TO STAGING AREA
 ALREADY
 710 DRILLERS RESUME ACTIVITIES
 TO MOVE DRILL RIG & EQUIP.
 TO SEW-11;
 800 SEACAST DELIVERS ANOTHER
 NEW 20-CY LINES ROLL OFF # 9660
 TO THE STAGING AREA;
 ADDITIONALLY
 TWO SOIL ISW ROLL OFFS (# 0008
 & # 9620) ARE MOVED FROM
 SEW-10 TO THE STAGING
 AREA.
 NOTE: THESE 2 ROLL OFFS DO NOT
 NEED KILN DRYT AS THEY'VE BEEN
 DE-WATERED & ONLY CUTTINGS (SAND)
 ARE INSIDE (NO MUD). ALL KEPT
 MARCH 1/23/13

SEW - 1 I

830 DRILLERS SHOVEL SOIL AWAY
FROM OUTER STEEL CASING

AT SEW - 1 I

900 DRILLERS PREPARE TO MOVE
EQUIP. TO SEW - 1 I

1000 LTR PREPARES 16" OD

STEEL CASING/PIPING

STICKUP - GRIND EDGES -

PRIVILE TO WELDING ONTO

EXISTING SEW - 1 I OUTER CASING

1145 GENE STREETER (SEACRAFT) ARR.

ONITE TO CHECK ROUTES FROM

SEW LINE TO TREATMENT BASIN

DURING FUTURE WATER TOW DISPOSAL

GET INFO NEEDED TO KNOW FOR
TRANSFER WATER TOW TO TREAT.

BLOG

1315 G. STREETER LVS. SITE

1500 DRILLERS HAVE MOVED

FAILING JES & DRILL RIG TO

SEW - 1 I & SET UP SUPPORT

BRACE UNDERNEATH STEEL

STICKUP HAS BEEN WEDGED

TO OUTER CASING.

1630 ALL LV. SITE

(146)

DAILY SUMMARY

SEW - 1 I

SET UP SEACRAFT

MMN 1/24/13

JANUARY 24, 2013

EXTRACTION WORK INSTALLATION

WEATHER: SUNNY & V. COLD

200 I ARR. ONSITE

UTB DRILLERS ONSITE 8

BOTCH HITZELBERGER - DRILLER

BRAE BAARER - HELPER

705 HES MTG. TOPIC: SKIN PROTECTION

710 DRILLERS RESUME SETTING UP

EQUIPMENT AT SEW - 1 I;

MUST MOVE DRILL CONTING

CONTAINER NEXT TO RIG & CONNECT

WELD PIPING CONNECTIONS,

AS BEFORE

900 LTR OBTAINS FUEL FOR

DRILL RIG & BACKHOE

930 LTR SETS UP STEEL PIPING

AT SEW - 1 I & MOVE

DRILL CONTING CONTAINER ADJACENT

TO THE DRILL RIG.

1330 DRILLERS HAVE WEDGED THE

STEEL PIPING TO THE FRONT OF

THE CONTAINER & MAKE CONNECTIONS

1400 DRILLERS MOVE THE TWO

NEW ROLLERS (#9781 & #9660)

TO THE SEW - 1 I VICINITY.

MIKE BRUT

MMN 1/24/13

(144)

SEW-1I

1500 LTD MOVES MOAB 2211

RET TO SEW-1I

1530 ALL W. SITE - WORK DAY

SHORTENED DVE TO EXTREME COLD

NOTE: MILLER NEW HYDRAULIC

LWE FROM TO BE DEFECTIVE;

THEREFORE, DRILLERS MUST

RETURN TO STORE TOMORROW

TO OBTAIN A REPLACEMENT &

ATTACH TO BACKHOE.

DAILY SUMMARY

SEW-1I

SET-UP, WELD PIPING

FROM STICKER TO WELL Casing

CONTAINER MOVE (2) NEW

ROLLERS TO SEW-1I

MMZ

1/24/13

(150)

JANUARY 25 2013

EXTRACTION WELL INSTALLATION

WEATHER: SUNNY & V. COLD

7:05 I ARR ON SITE AFTER CHECKING

OUT OF HOTEL

LTD DRILLERS ON SITE &

BUTCH HITZBERGER - DRIVER

BRAO BARNES - HELPER

7:10 HAS MTR. TRIC: HARD HATS

7:15 DRILLERS MOVE DRILL ROSS SPEED

FROM SETTING AREA TO

SEW-1I USING BACKHOE

AFTER CLEANING ROSS OF

DEBRIS (1 HR)

9:15 DRILL ROSS AT SEW-1I

MAKE ADDITIONAL PUMP TO SEW-1I

AND LOWER DRILL ROSS INTO BY

10:00 DRILLERS ATTACH NEW HYDRAULIC

LIVE TO BACKHOE

11:00 ALL OFF SITE - DRILLERS INFORMED

ME THAT STAINLESS STEEL OVER

CASING (IN WA) DELIVERED TO VTS TODAY;

THEREFORE, DRILLERS WILL HAVE TO

LOAD CASING ONTO TRAILER FOR

DELIVERY TO SITE ON MONDAY (1/24)

DAILY SUMMARY

SEW-1I

DOWN (1 HR) & LOWER ROSS

MMZ
1/25/13

MMZ (151)

ATTACHMENT 3
PHOTOGRAPHIC LOG

PHOTOLOG

SITE NAME: Old Roosevelt Field

CAMERA # Kodak Easy Share C913

Photograph #	Description	Date/Time	Photographer
1	Kiln Dust Container	1/14/13	MJE
2	Discharge Lines	1/14/13	MJE
3	Soil IDW Discharged into Container	1/14/13	MJE
4	Removing Gravel & Clay from Clogged Drag Bit	1/15/13	MJE
5	Investigation Derived Waste Removed from Drag Bit	1/15/13	MJE
6	Sand Soil IDW Drill Cuttings in Rolloff	1/16/13	MJE
7	Well Materials	1/16/13	MJE
8	30-Slot Stainless Steel Well Screen	1/16/13	MJE
9	Stainless Steel Well Screen & Sump at SEW-1D	1/18/13	MJE
10	Welding Stainless Steel Well Sections	1/18/13	MJE
11	Vertical Alignment Check Using Level	1/18/13	MJE
12	Stainless Steel Centralizers	1/18/13	MJE
13	Filpro #1 Sand Pack	1/18/13	MJE
14	Cement Mixer Truck	1/21/13	MJE
15	Cement Grout Transferred to Tub	1/21/13	MJE
16	Grout Pumped into SEW-1D	1/21/13	MJE
17	Tremie Pipe Retraction	1/21/13	MJE

PHOTOLOG

SITE NAME: Old Roosevelt Field

CAMERA # Kodak Easy Share C913

Photograph #	Description	Date/Time	Photographer
18	Emptying Drill Cuttings Container	1/21/13	MJE
19	Disassembling Piping Connections	1/21/13	MJE
20	Cultural Resources Survey	1/21/13	MJE
21	Sifting Soil for Cultural Resources Field Activity	1/21/13	MJE
22	Civil Surveyors	1/22/13	MJE
23	Disconnected Steel Stickup Piping at SEW-1D	1/22/13	MJE
24	Disconnected Steel Piping at SEW-1D	1/22/13	MJE
25	SEW-1D Surface	1/23/13	MJE
26	Preparing Steel for Welding	1/23/13	MJE
27	Welding Steel Stickup at SEW-1I (View South)	1/23/13	MJE
28	Welding Steel Stickup at SEW-1I (View West)	1/23/13	MJE
29	Connecting Hosing at SEW-1I	1/24/13	MJE
30	UTD moving IDW Rolloffs to SEW-1I	1/24/13	MJE
31	SEW-1I Set-Up	1/24/13	MJE



Photo 1: Kiln Dust Container



Photo 2: Discharge Lines



Photo 2: Soil IDW Discharged into Container



Photo 3: Removing Gravel & Clay from Clogged Drill Bit



Photo 4: Investigation Derived Waste Removed from Drag Bit



Photo 5: Sand Soil IDW Drill Cuttings in Rolloff



Photo 6: Well Materials



Photo 7: 30-Slot Stainless Steel Well Screen



Photo 8: Stainless Steel Well Screen & Sump at SEW-1D



Photo 9: Welding Stainless Steel Well Sections



Photo 10: Vertical Alignment Check Using Level



Photo 11: Stainless Steel Centralizers



Photo 12: Filpro #1 Sand Pack



Photo 13: Cement Mixer Truck



Photo 15: Cement Grout Transferred to Tub



Photo 14: Grout Pumped into SEW-1D



Photo 17: Tremie Pipe Retraction



Photo 15: Emptying Drill Cuttings Container



Photo 19: Disassembling Piping Connections



Photo 16: Cultural Resources Survey



Photo 21: Sifting Soil for Cultural Resources Field Activity



Photo 22: Civil Surveyors



Photo 23: Disconnected Steel Stickup Piping at SEW-1D)



Photo 17: Disconnected Steel Piping at SEW-1D



Photo 25: SEW-1D Surface



Photo 26: Preparing Steel for Welding



Photo 27: Welding Steel Stickup at SEW-11 (View South)



Photo 28: Welding Steel Stickup at SEW-11 (View West)



Photo 29: Connecting Hosing at SEW-11



Photo 30: UTD moving IDW Rolloffs at SEW-1i



Photo 31: SEW-1I Set-Up

ATTACHMENT 4
WELL CONSTRUCTION SUMMARY

WELL CONSTRUCTION SUMMARY

Project: Old Roosevelt Field Client: U.S. EPA Well No: SEW-1D

DRILLING SUMMARY

Drilling Co: Uni-Tech Drilling Company (UTD) Drillers: K. Hitzelberger
 Drill Rig Make/Model: Failing Jed A
 Borehole Diameters: 21"/16" Drilling Fluid: Water (Reverse Circ)
 Bits/Depths: 21" Drag bit (0-110')/16" Moab Drag bit (110'-535')
 Total Depth: 535 feet Depth to Water: Multiple
 Supervisory Geologist: Mike Ehnnot

WELL DESIGN

Casing Material: Stainless Steel Diameter: 8" Length: 480'
 Screen Material: Stainless Steel Diameter: 8" Length: 25'
 Slot Size: 0.030" Setting: 480'-500' & 510'-525'
 Filter Material: Filpro #1 Sand Setting: 470' - 535'
 Seals Material: Filpro #00 Sand Setting: 465' - 470'
 Grout: Cement Setting: 0 - 465'
 Surface Casing Material: 16" Steel Setting: 0 - 110'

Blank @ 500'-510'; Sump @ 525'-530'

TIME LOG

Started

Completed

525	Drilling and Installation:	<u>1/14/13</u>	<u>1/21/13</u>
535	Development:	<u>Upcoming</u>	<u>Upcoming</u>

WELL DEVELOPMENT

Method: Upcoming
 Static Depth to Water: _____
 Pumping Depth to Water: _____
 Pumping Rate: _____ Specific Capacity: _____
 Volume Pumped: _____

